DOCUMENT RESUME

ED 410 181 SO 028 606

TITLE	Good Study Habits and Academic Performance: Findings from the NAEP 1994 U.S. History and Geography Assessments.
INSTITUTION	National Center for Education Statistics (ED), Washington, DC.
REPORT NO	NCES-97-931
PUB DATE	Aug 97
NOTE	6p.
PUB TYPE	Collected Works - Serials (022) -- Reports - Descriptive (141)
JOURNAL CIT	NAEP Facts; v2 n4 Aug 1997
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Academic Achievement; *Educational Assessment; Elementary Secondary Education; *Geography; Grade 12; Grade 4; Grade 8; Home Study; Homework; Learning Strategies; Metacognition; National Surveys; Performance; *Reading Habits; Social Studies; Student Behavior; Study; *Study Habits; Time Management; Time On Task; *United States History
IDENTIFIERS	*National Assessment of Educational Progress

ABSTRACT

This document analyzes responses to questions included in a national assessment of knowledge of U.S. history and geography in an attempt to determine the relationship between study habits and academic performance. The National Assessment of Educational Progress (NAEP) 1994 asked 4th-, 8th-, and 12th-grade students specific questions regarding their knowledge of U.S. history and geography. The national survey also asked three questions concerning the students general study habits: (1) how much time they spent on homework; (2) how frequently they discussed their studies at home; and (3) how many pages they read each day at school. This issue of NAEP Facts examines answers given to those questions by students whose performance on the assessments fell near the 25th, 50th, and 90th percentiles of the NAEP scale. The questions referred to student habits in general and were not limited to U.S. history or geography. In general, the data obtained from the assessment showed a positive trend linking high performance on the assessment and good study habits. That is, students near the 90th percentile were more likely to report good study habits than those near the 50th percentile, and those near the 50th percentile were more likely to report good study habits than those near the 25th percentile. The data remained consistent for all categories except for 4th graders. More of the higher achieving 4th graders claimed to spend less time on homework than the lower achieving group. Reasons for this dichotomy are discussed. The document includes tabular representations of statistical data. (MJP)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 410 181

Good Study Habits and Academic Performance: Findings from the NAEP 1994 U.S. History and Geography Assessments.

National Center for Educational Statistics (ED), Washington, D. C.

Published: Aug97

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

SO 028 606

BEST COPY AVAILABLE

NATIONAL CENTER FOR EDUCATION STATISTICS

THE NATION'S REPORT CARD

NAEPFACTS

Vol. 2, No. 4 August 1997

Good Study Habits and Academic Performance: Findings From the NAEP 1994 U.S. History and Geography Assessments

Summary: *Analysis of data from the NAEP 1994 U.S. history and geography assessments found a real, but limited relationship between good study habits and academic performance, for 8th and 12th graders. For 4th graders, the analysis found either positive relationships, no relationship, or a negative relationship—mixed results that are consistent with previous research. Researchers are divided on whether this indicates that 4th graders are often assigned too much homework.*

The National Assessment of Educational Progress (NAEP) continuously monitors the knowledge, skills, and performance of the nation's children and youth in a variety of academic subjects. The data collected are available in major reports known as "Report Cards." The *NAEPfacts* series takes data collected for the Report Cards and uses them to highlight specific issues of particular interest to teachers, researchers, policymakers, and other individuals with an interest in education.

The NAEP 1994 U.S. history and geography assessments asked 4th-, 8th-, and 12th-grade students three questions about their general study habits. This issue of *NAEPfacts* examines answers given to those questions by students whose performance on the assessments fell near the 25th, 50th, and 90th percentiles of the NAEP scale.[1] The purpose is to determine if there is a relationship between study habits and academic performance.

Both assessments asked students the following three questions on their general study habits: (1) how much time they spent on homework; (2) how frequently they discussed their studies at home; and (3) how many pages they read each day at school and for homework. The questions referred to student study habits in general, not limited to U.S. history or geography. In answering the questions, students could select from a number of responses.[2]

The responses that indicated the most conscientious behavior were selected as identifying "good study habits." These responses were "spent more than one hour on homework every day," "discussed studies at home daily/almost daily," and "read more than 20 pages each day at school and for homework." The assumption that students giving these responses had better study habits than students who did not was considered reasonable, but refutable. By comparing the percentages of students performing near the 25th, 50th, and 90th percentiles who gave these responses, it was possible to determine whether or not students with higher scores were more likely to display good study habits than those with lower scores.[3]

U.S. History

In general, the data obtained from the U.S. history assessment (table 1) show a positive trend linking high performance on the assessment and good study habits. That is, students near the 90th percentile were more likely to report good study habits than

Table 1.—Academic performance and study habits, NAEP 1994 U.S. History Assessment
Responses of Students to General Study Habits Questions by Grade and Percentile

	25th Percentile	50th Percentile	90th Percentile	Trend
More than One Hour Spent on Homework Each Day				
4th Grade	18%	16%	12%	<
8th Grade	22%	27%	33%	>
12th Grade	20%	25%	37%	>
Discussed Studies at Home Almost Every Day				
4th Grade	50%	53%	59%	>
8th Grade	32%	36%	47%	>
12th Grade	27%	32%	38%	>
Read More Than 20 Pages Each Day in School and for Homework				
4th Grade	19%	22%	26%	>
8th Grade	9%	11%	13%	>
12th Grade	10%	13%	29%	>

> Indicates a positive trend linking academic performance and good study habits as conventionally defined.

< Indicates a negative trend linking academic perfoçmance and good study habits as conventionally defined.

The standard errors of the estimated percentages range from 1.5 to 5.2. It can be said with 95 percent certainty that, for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

Differences between groups may be partially explained by other factors not included in this table.

Shading is for clarity only.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1994 U.S. History Assessment.

those near the 50th percentile, and those near the 50th percentile were more likely to report good study habits than those near the 25th percentile. This is true for every category except one, 4th graders who said they spent more than an hour a day on homework. This category showed a negative trend—the better these students did, the less likely they were to say they spent more than an hour a day on homework.

Geography

Results from the geography assessment, summarized in table 2, were similar. Data for both 8th- and 12th-grade students showed a positive trend linking academic performance and good study habits for all three responses. However, data from 4th graders showed a positive trend for only one of the three responses, "Discussed Studies at Home Almost Every Day." Data for the other two responses showed no trend.

Summary and Conclusion

Data from the NAEP 1994 U.S. History and Geography Assessments show that there is a positive relationship between good study habits as here defined and academic performance in U.S. history and geography, in most cases. However, it is important to note that many students in the 90th percentile did not display good study habits. For example, data from the U.S. history assessment show that even though 8th-grade students in the 90th percentile were more likely to read more than 20 pages a day in school and for homework than those in the 50th and 25th percentiles, only 13 percent of those in the 90th percentile actually reported doing so.

Overall, the better students perform academically, the more likely they are to discuss their studies at home every day. This finding held true for all three grades on both assessments. Better-performing students were also more likely to read more than 20 pages a day, except for 4th graders in geography

Data from both assessments also showed that better-performing 8th- and 12th-grade students were more likely to spend more than an hour a day on homework. Data for 4th graders, however, gave different results. Fourth graders who performed well on the geography assessment were *not* more likely to spend more than an hour a day on their homework than students with lower scores. On the U.S. history assessment better-performing students were *less*

Table 2.—Academic performance and study habits, NAEP 1994 Geography Assessment
Selected Responses of Students to General Study Habits Questions by Grade and Percentile

	25th Percentile	50th Percentile	90th Percentile	Trend
More than One Hour Spent on Homework Each Day				
4th Grade	16%	16%	14%	
8th Grade	23%	27%	33%	>
12th Grade	22%	24%	38%	>
Discussed Studies at Home Almost Every Day				
4th Grade	53%	57%	61%	>
8th Grade	33%	37%	49%	>
12th Grade	27%	30%	38%	>
Read More Than 20 Pages Each Day in School and for Homework				
4th Grade	21%	21%	24%	
8th Grade	9%	10%	17%	>
12th Grade	9%	13%	26%	>

> Indicates a positive trend linking academic performance and good study habits as conventionally defined.

The standard errors of the estimated percentages range from 1.5 to 3.9. It can be said with 95 percent certainty that, for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

Differences between groups may be partially explained by other factors not included in this table.

Shading is for clarity only.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1994 Geography Assessment.

likely to spend more than an hour on their homework each day than lower-performing students.

This finding is consistent with other research regarding homework. Researchers have suggested different theories for both the causes and implications of these findings.[4] It may be that 4th graders are simply not ready for substantive homework. They may lack the attention span, the ability to budget their time, and the ability to establish an effective study area at home. The real function of homework at this age, then, would be to teach children how to do homework. However, it may also be that most 4th graders are ready for substantive homework. Slow learners do take longer (hence the negative correlation), but they benefit, and will perform better in higher grades. In general, researchers stress the importance of "quality" over "quantity" in assigning homework.[5]

The positive relationships between good study habits and performance on the NAEP assessments can be interpreted in various ways as well. On the one hand, the finding that high performing students are significantly more likely to discuss their studies at home almost every day supports recent research that has linked improved student achievement with parental efforts to ensure good study habits and involve themselves with the schools.[6] On the other hand, it is also possible that the academic abilities of high performing students enable them to read more easily, to find doing their homework less burdensome, and to enjoy talking to their parents about their successes in school. Increased effort may or may not be the most effective way to improve student performance. But the data also suggest that grade-specific and developmental factors may need to be considered when determining the amount and kind of homework that should be given.

Notes

1. The assessments used a 500-point scale for each of the three grades. NAEP identified the particular scale points that defined the 25th, 50th, and 90th percentiles on both the geography and U.S. history assessments. Students described as being at or near a percentile had a scale score that was within a 5-percentage point range on either side of the specified scale point. For example, translating this 10-percentage-point range into scale-score ranges for 12th-grade students on the U.S. history assessment gives the following results: 25th percentile, 259–270; 50th percentile, 284–292; 90th percentile, 319–335. A procedure known as scale anchoring was used to develop descriptions of student performance at or near these percentiles. Questions given as examples of student knowledge at a given percentile were answered successfully by at least 65 percent of the students within the appropriate scale-point

range. The criterion was set at 74 percent for multiple-choice questions to correct for the possibility of answering correctly by guessing.

2. For example, when asked how much time they spent on homework, students could answer "More than one hour," "One hour," "One half hour or less," "Assigned/Don't usually do," or "Not usually assigned."

3. For the complete range of responses to the questions, see *NAEP 1994 U.S. History Report Card*, pp. 90–92 and *NAEP 1994 Geography Report Card* pp. 94–96.

4. For a review of past research, see Cooper, Harris (1994), *The Battle Over Homework*, Corwin Press, Thousand Oaks, Calif.

5. Paulu, Nancy, (forthcoming), *Helping Your Students with Homework*, Office of Educational Research and Improvement, U.S. Department of Education, Washington, DC.

6. Chistenson, S.L. (1992). Family factors and student achievement: An avenue to increase students' success. *School Psychology Quarterly*, 7(3), 178–206, and

Heller, L.R., and Fantuzzo, J.W. (1993). Reciprocal peer tutoring and parent partnership: Does parent involvement make a difference? *School Psychology Review*, 22(3), 517–34.

For Further Information

Helping Your Students with Homework, Nancy Paulu. Forthcoming. Contact Nancy Paulu, Office of Educational Research and Improvement, U.S. Department of Education, Washington, DC 20208–5653, 202–219–2110.

NAEP 1994 U.S. History Report Card: Findings from the National Assessment of Educational Progress, NCES 96–085. Single copies are available free from the National Center for Education Statistics, U.S. Department of Education, Washington, DC 20208–5653. Copies may also be obtained over the World Wide Web at http://www.ed.gov/NCES/NAEP/.

NAEP 1994 Geography Report Card Look: Findings from the National Assessment of Educational Progress, NCES 96–087. Single copies are available free from the National Center for Education Statistics, U.S. Department of Education, Washington, DC 20208–5653. Copies may also be obtained over the World Wide Web at http://www.ed.gov/NCES/NAEP/.

NAEPfacts is a publication series that briefly summarizes findings from the National Assessment of Educational Progress (NAEP). The series is a product of the National Center for Education Statistics, Pascal D. Forgione, Commissioner, and Gary W. Phillips, Associate Commissioner for Assessment. This issue was written by Alan Vanneman, of the Education Statistics Services Institute, in support of the National Center for Education Statistics. To order other NAEP publications, call Bob Clemons at 202–219–1690, or e-mail bob_clemons@ed.gov. The NAEP World Wide Web Home Page address is http://www.ed.gov/NCES/NAEP/.

United States
Department of Education
Washington, DC 20208–5653

Official Business
Penalty for Private Use, $300

Postage and Fees Paid
U.S. Department of Education
Permit No. G–17

FIRST CLASS